

MANUFACTURE OF MASK FOR X-RAY EXPOSURE

Patent number: JP1073720
Publication date: 1989-03-20
Inventor: SUGISHIMA KENJI; YAMADA MASAO
Applicant: FUJITSU LTD

Classification:
- International: G03F1/00; H01L21/30; G03F1/00; H01L21/02; (IPC1-7):
- european:
Application number: JP19870231805 19870916
Priority number(s): JP19870231805 19870916

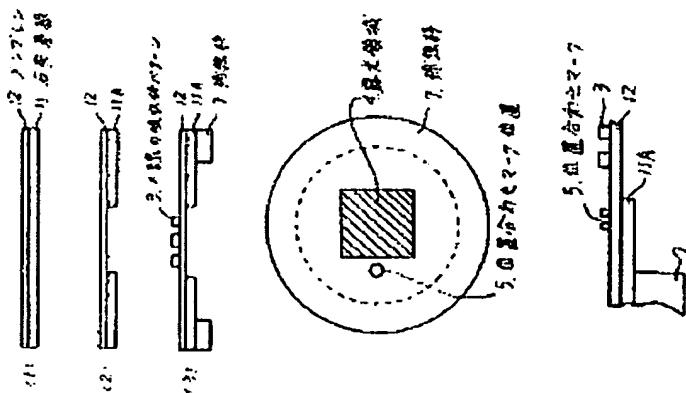
[Report a data error here](#)

Abstract of JP1073720

PURPOSE: To manufacture a stable main plate by using a quartz substrate of a small thermal expansion coefficient as a substrate for X-ray exposing mask by a method wherein the main plate is grown on the quartz substrate, the quartz substrate in the exposure region is removed, and patterns comprising X-ray absorbing body are formed on the main plate. CONSTITUTION: A diamond film 12 as a main plate is grown on a quartz substrate 11 by vapor growing process. The frames 11A, 11B of the quartz substrate 11 are formed by etching away the central part of the quartz substrate 11 leaving the exposure region 4. Besides, X-ray absorbing patterns 3 made of gold etc. are formed on the surface of the diamond film 12 while the frames 11A, 11B are respectively fitted with reinforcement frames 7 to complete the title X-ray exposing mask. Furthermore, alignment masks are made on the diamond film 12 as a main plate so that the manufacture of stable main plate and the X-ray

SS0020 70

exposure mask may be assured.



Data supplied from the **esp@cenet** database - Worldwide